Remarks

Claims 1-18 remain pending in this application after entry of this paper. The Examiner has rejected pending claims 1-18 under 35 U.S.C. § 103(a) as being unpatentable over Gasper et al. (US Patent No. 5,278,943) in view of Tubman et al. (US Patent No. 5,820,384).

Applicants' invention generally comprehends a method and apparatus for recording prosody for fully concatenated speech wherein a digital voice library and a method of making a digital voice library for use in text to concatenated voice applications are disclosed.

Regarding the rejection of claims 1 and 10, a method of making a digital voice library used for converting text to concatenated voice in accordance with a set of playback rules is disclosed. Further, the digital voice library includes a plurality of speech items and a corresponding plurality of voice recordings wherein each speech item corresponds to at least one available voice recording. The multiple voice recordings that correspond to the speech items represent inflections of that single speech item. The method comprises establishing a vocal sequence and then recording the voice talent uttering the vocal sequence. A complex tone is generated that reflects a particular inflection required for a particular voice recording of a particular speech item. The complex tone is composed of portions of the recording of the voice talent uttering the vocal sequence. The voice talent is recorded reciting the speech item to make the particular voice recording. The voice talent uses the complex tone as a guide to allow the voice talent to recite the particular speech item in accordance with the particular inflection.

Specifically, the complex tone acts as a guide from which the vocal talent is to follow when reciting the vocal sequence to provide a particular inflection for a particular voice recording. The digital voice library is generated from speech items representing various

inflections recorded as recited by the voice talent specifically using the complex tone composed of the voice talent's own utterances as a guide.

However, in Gasper pre-recorded speech samples retrieved from a library are processed to add inflection and other auditory effects to create animated or artificial voices. Gasper merely describes a voice animation system whereby pre-recorded speech samples are divided into basic segments for use in a text to speech synthesizer to artificially synthesize speech. The voice talent does not recite vocal sequences with the proper inflection while using a complex tone composed of the voice talent's own utterances as a guide, but rather, it is the pre-recorded samples that are processed after being recorded to add inflection and other auditory effects to create animated or artificial voices according to a prosody rule set. In Applicant's invention, a complex tone is generated "that reflects a particular inflection required for a particular voice recording of a particular speech item" and further "recording the voice talent reciting the particular speech item to make the particular voice recording, the voice talent using the complex tone as a guide to allow the voice talent to recite the particular speech item in accordance with the particular inflection." Thus, in Gasper, the speech animation and inflections are synthesized in a second stage after the segments are retrieved from the library and speech output is then processed from the pre-existing segments whereas in Applicant's invention, the voice talent uses the complex tone as a guide to recite the particular speech items in accordance with the particular inflection, which are segmented and stored in the digital library.

The Examiner recognizes that Gasper fails to specifically disclose a method for generating a complex tone that reflects a particular inflection required for a particular voice recording of a particular speech item. Also, Gasper fails to describe or suggest the complex tone being composed of portions of the recording of the voice talent uttering the vocal sequence and for recording the voice talent reciting the particular speech item, the voice talent using the complex tone as a guide to allow the voice talent to recite the particular speech item in accordance with the particular inflection.

The Examiner relies on Gasper in view of Tubman. Applicant contends that Tubman fails to overcome the deficiencies of Gasper, and further, that there is no motivation to combine the teachings of the references in such a way to achieve the claimed invention.

Gasper fails to recognize or suggest a need for generating a complex tone having a particular inflection needed for a particular recording from portions of the recording of the voice talent or for using the complex tone as a guide by the voice talent to recite specific utterances having specific inflections for making recordings necessary to generate the digital voice library. Thus, Gasper fails to provide the required motivation to combine.

Tubman merely describes a recording method and system for providing acoustical prompts for Karaoke participants. The Tubman method employs a listen-sing-along procedure effected via the interaction of the spoken instructor-promptings and the Karaoke participant. There is no suggestion that any of the teachings of Tubman would be useful in a method of making a digital voice library used for converting text to concatenated voice in accordance with a set of playback rules. Additionally, Tubman does not suggest modifying the system taught by Gasper to achieve Applicant's invention.

As such, there is no suggestion or motivation to combine the voice animation system of Gasper and the Karaoke system described in Tubman to achieve the claimed invention. After all, Tubman only describes a recording method and system of prompting a message accordingly with the melody of a vocal line, but only in the very limited application of enabling a Karaoke participant to generate his/her own renditions of vocal in accompanying relationship with music.

Independent claim 10 is believed to be patentable for similar reasons as described above for claim 1.

Claims 2-9, and 11-18 are dependant claims and are also believed to be patentable.

Respectfully submitted,

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